

Calculators are not permitted and working must be shown.

Unit Assessment level:

1. Calculate:

a. $\frac{3}{7} \times \frac{2}{5}$

b. $\frac{3}{5} \div \frac{1}{2}$

c. $\frac{2}{9} + \frac{1}{3}$

2. Simplify:

a. $\frac{x(x-1)}{(x+6)(x-1)}$

b. $\frac{(5x+2)(x+6)}{(x+6)^2}$

c. $\frac{x^2+7x+12}{x^2-16}$

3. Express as single fractions:

a. $\frac{4}{a} - \frac{7}{b}$

b. $\frac{p}{r} \times \frac{q}{7}$

c. $\frac{3}{d-1} \div \frac{e}{2}$

Assessment level:

4. Calculate:

a. $1\frac{3}{5} + 2\frac{4}{7}$

b. $1\frac{1}{8} \div \frac{3}{4}$

c. $\frac{2}{7} \left(1\frac{3}{4} + \frac{3}{8} \right)$

5. Simplify:

a. $\frac{5(2x-3)}{4x^2-9}$

b. $\frac{p^2-4q^2}{3p+6q}$

6. Express as single fractions:

a. $\frac{4}{(x-2)} - \frac{3}{(x-4)}$

b. $\frac{x}{x^2-4} \div \frac{3}{x-2}$